

When found, the shell was complete to the first break in the band on the body whorl. In captivity it quickly completed its shell, but made an incomplete lip—a trace of the colouring being seen on the inner lip. It then developed during the summer months the abnormal growth. It is interesting to note the weakening of the band at the beginning of captivity; and also that a trace of the band is to be seen on the abnormal growth when held to the light, and that the growth is lined with nacre.

Mr. Woodward also exhibited sectioned specimens of *H. nemoralis* from Dogs Bay Connemara and from Huccombe, South Devon, for comparison with the Caldey specimen.

By Dr. Boycott, a literary exhibit from "Pearson's Magazine" showing the use made of the locality of a well-known but uncommon shell in the tracing of a criminal.

ORDINARY MEETING.

FRIDAY, 9TH JUNE, 1922.

A. S. KENNARD, F.G.S., President, in the Chair.

The following communications were read:—

1. Notes on several forms of the genus *Pæcilozonites*. By Lieut.-Col. A. J. Peile.

2. On the Chiton Fauna of Australia. By Edwin Ashby, F.L.S., M.B.O.U.

[Abstract.]

Mr. Edwin Ashby showed a very fine collection of Polyplacophora representing the Chiton fauna of Australia. He explained that the Pacific Coast of the American Continent and Australia were competitors for the position of the Metropolis of the world's Chiton fauna. At the present time Australia holds the premier position in number of species, but in both regions there are still no doubt many new forms awaiting discovery.

Some very large chitons were shown, from 4 to 5 inches in length, but it was stated that for beauty of design and delicacy of tracery the sculpture of the rare and minute members of the genus *Acanthochiton* far surpass the sculpture of the larger forms. The habits of the various forms were referred to, and it was shown that many were only found at quarter-tide or half-tide, as the case may be, their habitat being restricted to that particular depth of water, so that on searching only 6 inches or so deeper that species would not occur at all, but would be replaced by another species. This regularity of depth distribution has led some zoologists to define the various zones in which certain marine life is to be found by the respective chitons that inhabit that particular depth of water.

Mr. Ashby then referred to some strange organs he had described under the name of "Spearhead spicules", occurring consistently on the girdle of *Loricella angasi*, H. Ad. & Ang. On this species these coarse branching bristles are surmounted with swollen heads shaped like the head of a spear, and white in colour, whereas the stalks are brown. These spear-headed bristles occur round the girdle opposite the finger-like processes that fringe the girdle. Smaller "spear-heads" were pointed out pushing their way through the girdle scales down the centres of these finger-like extensions of the girdle.

The speaker then showed organs somewhat analogous to these, which he had discovered on the girdles of the representatives of the genus *Kopionella*, Ashby. He pointed out that in both genera these organs were evidently deep seated, and while the exact purpose they serve in the life of the animal is not yet known, he suggested that they probably have some connection

with the nerve-fibres that find their way in canals between the tegmentum and articulamentum of the shell into the girdle tissues.

He next showed various forms of *Stenochiton*, a genus that has for its host various forms of sea grasses, *Posidonia*, *Cymodocea*, etc. One form lives in the brown sheath of the long ribbon leaves, buried several inches in the sand. The habits of the other forms were also alluded to.

While all the known species have been described from the State of South Australia and up to the present only recorded from three Australian States, Mr. Ashby expressed the opinion that ultimately they will be discovered in all the other States, and, in fact, *Stenochitons* or some kindred form will be found throughout the world, wherever these marine plants, known as *sea grasses* occur. He showed that until the habits of the *Stenochitons* were understood most of the recognized species were either quite unknown or considered extremely rare.

3. A list of the Nudibranchiate Mollusca recorded from the Pacific Coast of North America, with a note on their Distribution. By Chas. H. O'Donoghue, D.Sc., F.Z.S., and Elsie O'Donoghue, B.A. (communicated by G. C. Robson, M.A., F.Z.S.).

4. Note on *Trochus flavidus*, *T. pallidulus*, and *T. flammiger* of Dunker. By J. R. Le B. Tomlin, M.A., F.E.S.

The following exhibits were made :—

By Col. Peile and Mr. Kennard. Specimens illustrating Col. Peile's paper.

By Mr. Ashby. A very complete collection of the Australian Polyplacophora illustrating his paper.

By Mr. Iredale. An unique edition of Lamarck's "*Animaux sans vertèbres*".

By Mr. Spence. Land shells from South Africa, including *Achatina* and species of *Ceras*.

By Dr. Boycott. Abnormal specimens of *Limnæa pereger*, one of which is of planorboid shape.
